Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: WC Docket No. 13-184

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Public Comment on Notice of Proposed Rulemaking for the Modernizing the E-rate Program for Schools and Libraries (WC Docket No. 13-184)

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OneCommunity is writing in response to the request for public comment on the Notice of Proposed Rulemaking for the *Modernizing the E-rate Program for Schools and Libraries* (WC Docket No. 13-184). Our comments address the issues of re-prioritizing E-rate funding to support the strengthening of our nation's high-speed broadband infrastructure through the propagation of open, sector-crossing broadband network investments. The resulting reformed program should allow for commitments of higher levels of capital, over longer time lines, with flexibility to allow communities to make the investments in community-wide education networks that deliver capacity the schools need while benefitting multiple public stakeholders under a sustainable model.

OneCommunity is a non-profit broadband provider located in Cleveland, Ohio. The mission of OneCommunity is to expand high-speed broadband access and adoption to strengthen our region's economy. Our vision is that advanced digital capabilities and effective use of technology will help transform Northeast Ohio and establish the region as a national hub for innovation and economic growth. OneCommunity operates one of the largest and fastest fiber optic broadband networks in the world. In 2010, OneCommunity was a recipient an ARRA federal Comprehensive Community Infrastructure grant, and has built an open and neutral network that optimizes middle-mile services and connects and serves more than 2,000 institutional subscribers and community anchor institutions.

We believe the current E-rate funding model is predominantly an operating expense subsidy and, at best, reinforces a silo-based approach to building networks, which is inefficient and

short-sighted in realizing the national benefit of broadband infrastructure. E-rate must shift focus to strengthening the country's broadband infrastructure through capital investment in support of education and for other public sector institutions to access, share, and leverage a robust, broadband infrastructure that is highly available in urban, suburban, and rural areas.

A new E-rate strategy must include:

A priority weighted for lateral builds to ARRA funded middle-mile networks to leverage recent government investments. A strategy for schools to take advantage of BTOP middle-mile fiber infrastructure allows the schools access to other Community Anchor Institutions, providing opportunity for cross-sector collaboration, shared services strategies, and contributes to the sustainability of the BTOP middle-mile networks.

A priority weighted for schools to join or form consortiums of cross-sector public institutions (libraries, higher education, municipalities, public safety and local governments) or public/private partnerships where there is a shared expertise in building, managing, and sustaining a fiber optic network. Schools should focus on education and instruction, not on technical infrastructure and network engineering. Priority should be given to communities who form coalitions to build out the school networks and provide a sustainable operating model through utilization of excess capacity by other community anchors, securing the educational network's future.

A priority to allow schools to enter into dark fiber Indefeasible Rights of Use (IRU) agreements. We encourage the FCC to pattern IRU agreements after the strategies that are in place for the FCC's Healthcare Connect program (Healthcare Connect Fund - FCC 12-150 - Appendix D - § 54.634 Eligible services (b)).

A priority for school districts to have access to low-cost or no-cost loans to cover the non-discounted portion of their Wide Area Network (WAN) capital build cost. For many school districts, raising the capital required to cover their non-discounted portion of the cost to deploy a WAN fiber optic infrastructure is beyond their means. Making capital funds available to schools allows them to establish a network infrastructure strategy that can provide a long-term return on investment, reduce their monthly recurring charges, and ensure that the district has a scalable network infrastructure for increases in future demand.

As part of this priority, we encourage the FCC to incentivize the schools to build networks based on open access/open architecture standards by providing lower-cost or longer-term loans to schools that adhere to open network architecture standards. An open architecture network provides the advantage of the school receiving network enabled services (internet, VoIP and the potential for future services) over a single network, from a variety of service providers without restrictions that may be in place from proprietary network providers. When network services contracts expire, an open architecture network positions the schools for competitive bids from multiple service providers that can utilize the existing network eliminating the need for new service providers to build (or overbuild) new network infrastructure. The new provider

can utilize the existing network infrastructure, reducing the drain on the E-rate funding pool. Open architecture networks will also provide accessible network assets for current and future public/private sector entities that are in the same proximity as the school(s), which can maximize the networks long-term value.

OneCommunity has worked with several school districts to determine the best opportunity to leverage E-rate funding in order to modernize their network infrastructure, which has positioned the schools to utilize high definition digital video for distance learning and implement wide-scale, network dependent online assessment programs.

CASE STUDY 1: In 2006, the Cleveland Metropolitan School District, in Cleveland Ohio was struggling to initiate online learning initiatives and operational efficiencies due to their insufficient network infrastructure.

The Cleveland Clinic, a respected healthcare provider in Northeast Ohio, seized the opportunity to support the district and enable 21st century learning by investing $1.2 million to establish CMSD's high speed fiber optic network The Clinic's investment was the catalyst for CMSD to access and activate $8.7 million in E-rate funds to design and build their fiber optic network. At the time, CMSD was able to qualify for an 86% reimbursement from the Federal E-rate program to build their fiber network. The Cleveland Clinic's investment provided CMSD with the funding necessary to cover their 14% of the Wide Area Network build. The fiber network build connected 100+ CMSD schools and facilities to a state-of-the-art fiber ring as part of the OneCommunity ultra-broadband network. As a result, CMSD has one of the best PK-12 digital infrastructures in the country at the same operating cost as before their network investment but at 300 times the capacity/speed (see Table 1).

TABLE 1: Comparison of Yearly Costs of Dual T1 Service and Gigabit Optical Fiber Service

Type of Connection	Bandwidth	Service Cost per Year
Dual T-1 Lines (Prior to 2005)	.3 megabytes/per second per school	$1,142,400
Gigabit Optical Fiber (2006-2011)	128 megabytes/per second per school	$1,552,236
Gigabit Optical Fiber (2012)	1GB/per second per school	$1,214,800

CMSD has continued to benefit from increased capacity and has been able to reduce its monthly recurring costs (MRC) through competitive bidding of services from multiple providers.

Although the E-rate strategy for CMSD was extremely successful and has enabled the school district to provide a digital learning environment for its students, we have had many other experiences with school districts that would like to access high speed networks but do not have the capital funding necessary to cover their non-discounted portion of the network infrastructure build.

Case Study 2: Trumbull County, a rural area of Northeast Ohio pursued the opportunity to build a wide area network to service several small school districts within their county. They were very interested in providing equitable, high-speed network access to all of the schools within the county, some of which were woefully under resourced and others, in more affluent communities were enjoying higher capacity. The county proposed building a fiber optic network that would provide all schools with high-capacity network services but the initiative stalled as a result of several factors. First, the less affluent schools could not commit funding to the capital costs of the proposed build which resulted in a longer return on investment requirement and increased the monthly recurring costs for all of the collaborating schools. The affluent schools also realized that they would need new network infrastructure built to all of their schools because their existing proprietary network might not be leveraged as part of the collaborative strategy. The challenge of raising capital combined with the requirements to overbuild network infrastructure impeded the collaborative benefit that this type of initiative could have provided.

The modernization of the E-rate program should enable schools to; access high-speed fiber optic networks by providing supportive capital funding, emphasizing cross-sector collaboration, and utilization of ARRA-funded middle-mile networks. The combination of these recommended changes will provide schools with long-term benefits from their network investments while strengthening the long-term success of both the E-rate program, and our national broadband infrastructure.